Lessons From The Colorado Multi-Use Network (MNT)

The State of Colorado's statewide multi-use network (MNT) is a not-unsuccessful state government effort to aggregate and leverage all of its telecommunications service purchasing into a single contract. The MNT succeeded in establishing robust network access points at 64 County seats in Colorado, including a handful of counties which have tiny off-season populations, such as Hinsdale County, area approximately 1,100 miles, with a population of a little over 800.

The original requirements of the MNT RFP were to provide at least 20MB of ATM connectivity in each of the State's county seats. In practice, the smaller and more remote counties have received less (10 MB) and the implementation of ATM technology has been hampered by the need for expensive router replacements or upgrades by small budget school districts and others.

The MNT resolved a number of problems the State of Colorado had been facing with its own statewide IT/Telecommunications development needs. The MNT was designed to provide adequate T-1 ATM availability for State agency communication requirements (those that were evident and predictable as of 1999). To a great extent, the MNT has succeeded in achieving its 1999 goals. However, it did not succeed in removing the barriers to higher-bandwidth technology development for the State, so it's achievements have been somewhat frozen in time. This was primarily due to a failure to hold Qwest to the more demanding requirements (those beyond minimum compliance) in the contracting process. In brief, Qwest won the MNT contract so as not to lose the State's business and then proceeded to limit the effect of the contract on all its existing and high-margin business with the State.

Other failures added to the problem. Failures of personnel, management systems, marketing, and technical implementation. The best example of personnel failure was the story of the State's ATM expert. The Colorado Division of Telecom ATM expert was a woman who had gone from midwestern pole-climbing technician experience to upper level project management at Sandia Labs in New Mexico. She did not fare well in the predominantly male management environment of the Colorado Division of Telecommunications, which was originally managed by other, male pole-climbing technician types who had not had so stellar a career, and eventually managed by political appointees and career bureaucrats with no telecom experience at all (the current director of the division previously managed the State motor pool). She resigned before the MNT RFP hit the street to accept a position at Lockheed Martin in Colorado. Then a secondary effect of the division's management style kicked in: her expert position was downgraded into an entry level technical position and frozen to save personnel dollars. Her responsibilities were handed to a much less-experienced technician who was told to learn about ATM.

Another personnel failure was the loss of a technical manager who was developing a GIS database mapping system for State circuits, a system that was originally planned to be a requirement of the MNT RFP. A system was developed and demonstrated which

displayed a GIS map of local circuits and their origin and termination points as well a circuit numbers. This was to be a minimum requirement for the winning vendor of the MNT RFP. However, when that technically adept manager left, the database project was terminated, and his position was also downgraded and frozen.

From the time the MNT RFP was conceptualized in 1998 to the "completion" of its implementation in 2003 (with three counties still pending), there were about a half dozen management changes at all levels, including a change of executive administration from Democratic to Republican. And the management style shifted progressively away from technology competence and toward political appointees.

As a result, the whole ethos of the original concept was largely lost. The original concept included elements of business simplification through outsourcing billing and order entry; and the idea that the MNT was not meant to save money immediately, but rather spend the same amount of money and receive both more value and greater availability of services for it. The short term goal was predictability and greater value. The long term goal was simplification and cost savings of aggregate purchase. Both of these goals became muddled due to inadequate attention to contracting issues and the dislocation of management knowledge of the project.

MNT Failures

The MNT as proposed in the RFP was a layer 2 network. At the time the MNT was being planned, the state of Colorado had a contract for layer 3 (Internet access services) with Colorado SuperNet, a higher-ed coalition-created ISP that pioneered institutional and eventually consumer Internet access in Colorado. Pressure from vendors who had subsequently entered the ISP business (including Qwest) forced the state to divest itself of SuperNet, which was sold to Qwest and dismantled. However, SuperNet initially began as a non-profit (based at the Colorado School of Mines) and eventually added a for-profit subsidiary to expand its base of users into commodity commercial and individual Internet access. The State should have sold only the for-profit side of SuperNet and kept the non-profit for serving the Layer 3 needs of State agencies, educational institutions, and other non-profit organizations that would qualify for MNT participation under the so-called "Beanpole" process. It is thought that pressure from Qwest forestalled this option. To replace the SuperNet contract for layer 3 services, a separate RFP process was conducted roughly in parallel with the MNT RFP process. It was a management oversight failure at the Telecom Division not to combine the two. This failure continues to haunt the MNT program because Qwest's protection of its high-margin layer 3 services are in large part the reason for its resistance to effectively marketing the MNT to all who can benefit from it.

Qwest also out-lawyered the MNT when the initial contract negotiations were conducted. The contract was vetted on the State side by a single attorney from the State Attorney General's office, a retired military lawyer who reportedly had experience with government procurement contracting from his military service. In addition to minimum

requirements of the RFP, there were a number of critical requirements (a billing and tracking system for example) which the State attorney did not aggressively pursue with Qwest negotiators. As a result, Qwest, pleading additional costs for any service beyond stated minimums in the MNT RFP, negotiated a bare-bones compliance with the State and then proceeded to further starve the process by understaffing the process, failing to create a website with information for potential users, and a number of other, transparently obvious, actions to reduce the effectiveness of the MNT concept. Qwest acted to protect its old business culture and existing contracts, even when the MNT contract called for conversions to new service.

The State of Colorado had hoped, for example to outsource the billing and tracking of telecom services through the winning vendor, thereby replacing at least three internal rebilling systems that had produced embarrassing revenue shortfalls in recent years. As a result, as recently as a year ago, the MNT billing was being done on a single user license Quickbooks system and users tracked via Microsoft Excel spreadsheets.

Qwest also failed to adequately pursue "Beanpole" grant opportunities. Instead they merely presented proposals in response to county and regional Beanpole RFPs which restated their MNT contract offerings. They did not address the need for added value or infrastructure beyond the State requirements and so lost the Beanpole opportunity for buildout. Then they proceeded to confuse the issue of how the winning Beanpole contractors would connect to the MNT.

The incompleteness of the Qwest MNT service has never been called into question, although they continue to lack operating relationships with a dozen small LECs in the State and they refuse to provide higher-bandwidth "next step" development options to users such as k12 schools in any coherent or uniform fashion.